

## **Abstract:**

**On these notes, in a succinct and eclectic manner, are highlight the main à priori geological knowledge that a petroleum geologist must have to make fruitful geological observations in foredeep basins either in the field or seismic data or sub-surface data. Colville basin and the stratigraphic column of Brooks (foredeep basin in Alaskan onshore) are taken as characteristic examples of these types of sedimentary basins. The main tectonic-sedimentary units, the different discordances, the flexural subsidence, and the deformations induced either by the loading of the sedimentary prism or by thermal contraction, are described. In the same way, the dimensions, evolution and burial history of this type of basins are reviewed. Their knowledge is a *sina qua non* condition for the recognition and evaluation of their potential petroleum systems.**